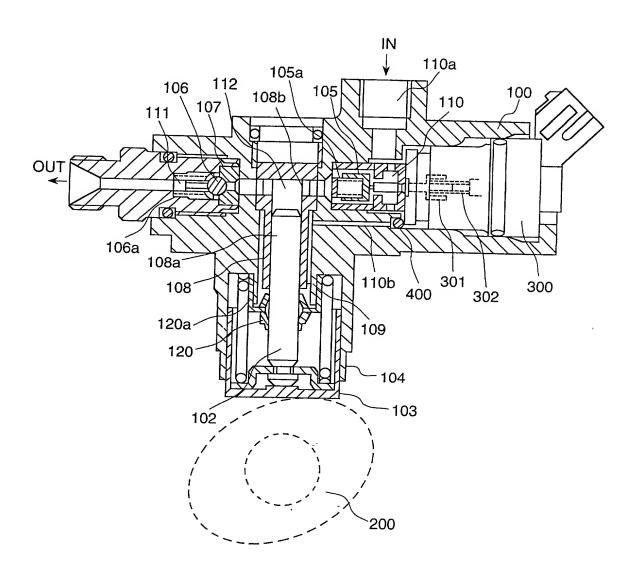
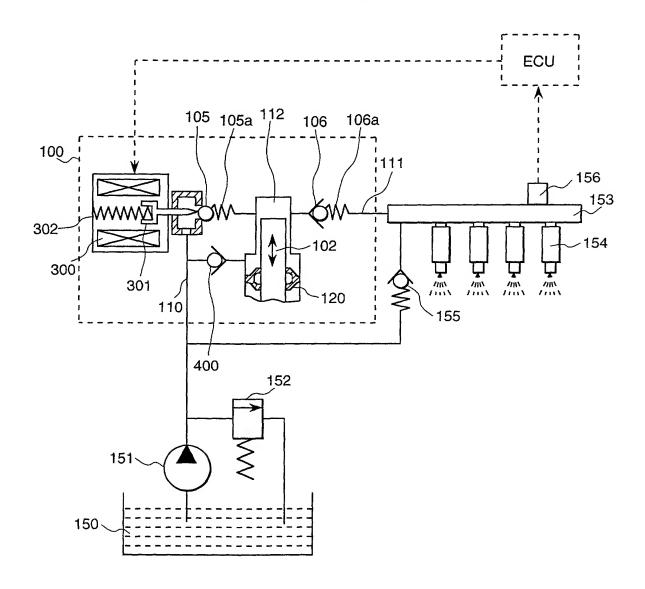
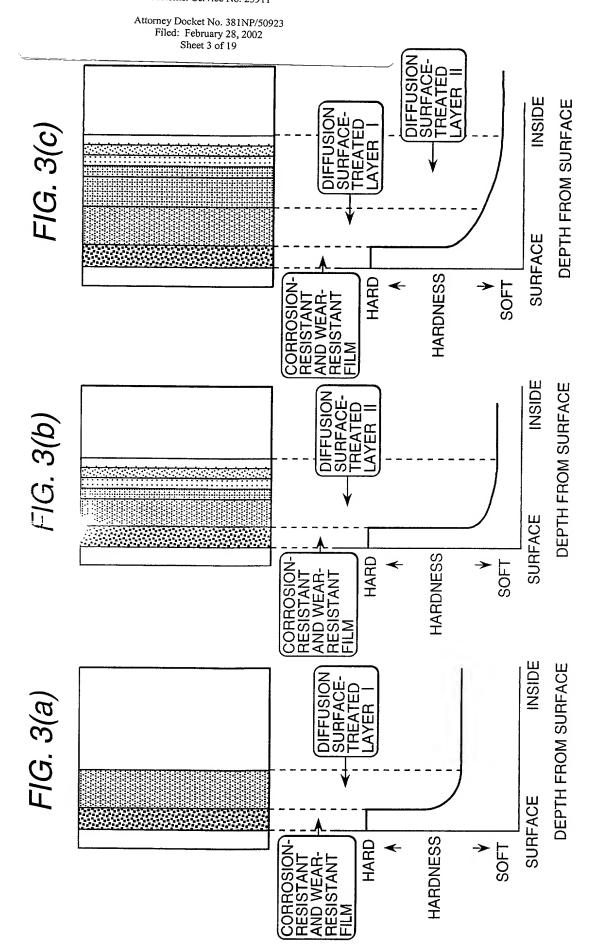
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FIG. 2





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FIG. 4(a)

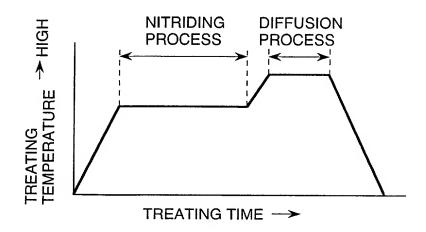
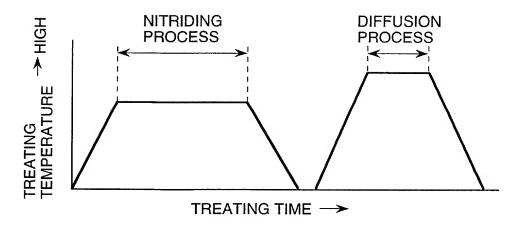
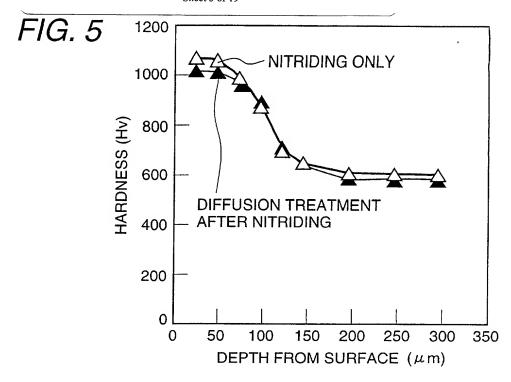
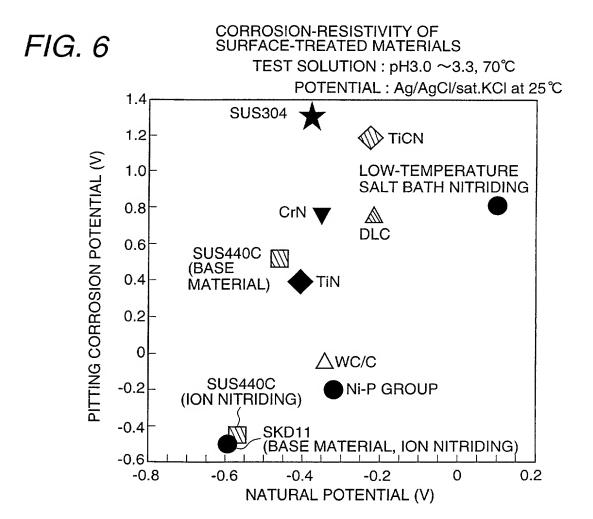


FIG. 4(b)



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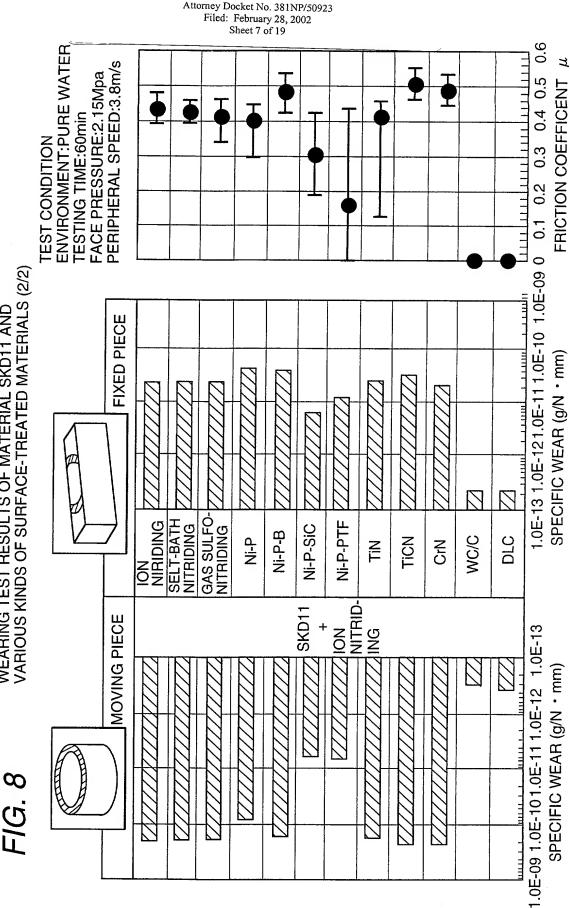
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WEARING TEST RESULTS OF MATERIAL SKD11 AND VARIOUS KINDS OF SURFACE-TREATED MATERIALS (1/2)

0.5 **ENVIRONMENT: PURE WATER** (b) FRICTION COEFFICIENT FACE PRESSURE:2.15Mpa PERIPHERAL SPEED:3.8m/s FRICTION COEFFICENT 0.4 **TESTING TIME:60min** 0.3 TEST CONDITION 0.2 0.1 0 1.0E-13 1.0E-121.0E-11 1.0E-10 1.0E-09 FIXED PIECE SPECIFIC WEAR (g/N·mm) GAS SULFO-NITRIDING SELT-BATH NITRIDING (a) SPECIFIC WEAR ION NIRIDING Ni-P-PTF Ni-P-SiC Ni-P-B DLC WC/C TICN Z-P SrN Z H PERING) SKD11 (QUEN-CHING/ MOVING PIECE TEM-1.0E-09 1.0E-101.0E-11 1.0E-12 1.0E-13 SPECIFIC WEAR (g/N·mm)

with that their their their than the

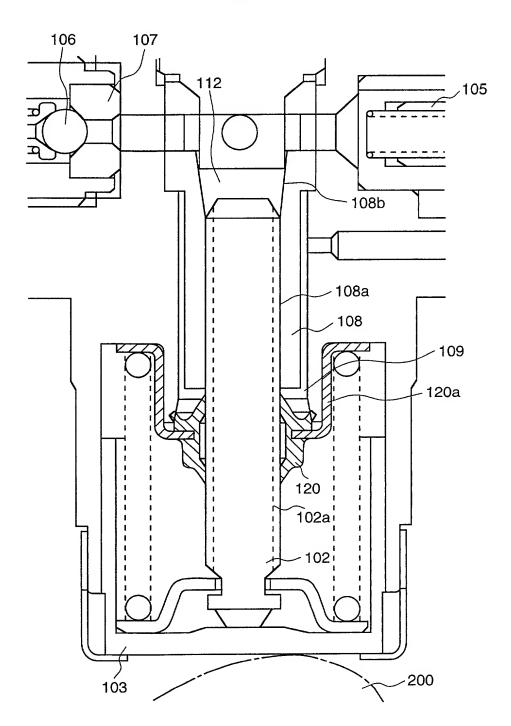
then they don't dien then they the



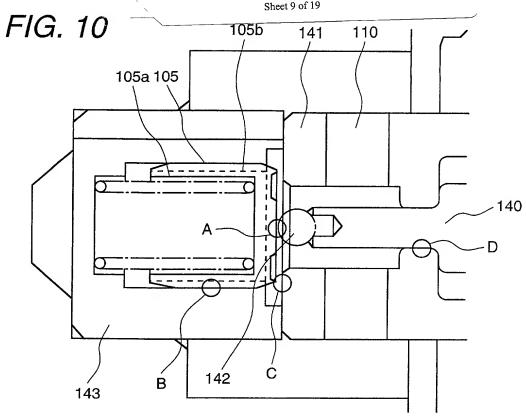
(b) FRICTION COEFFICIENT

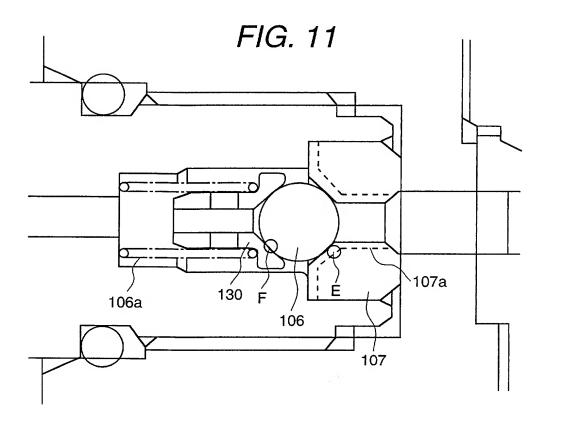
(a) SPECIFIC WEAR

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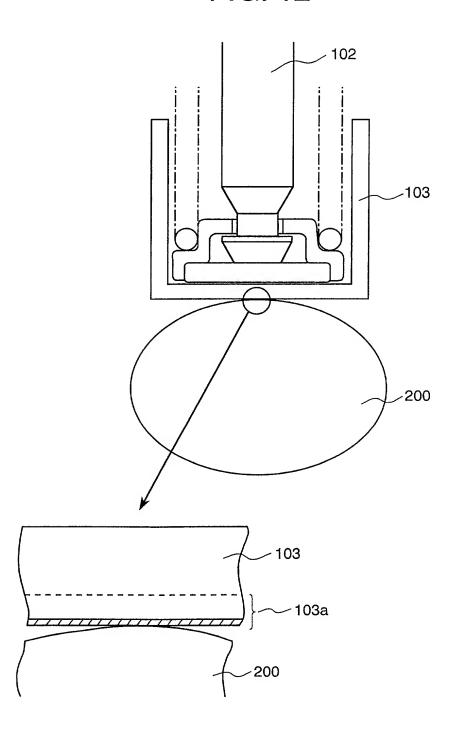


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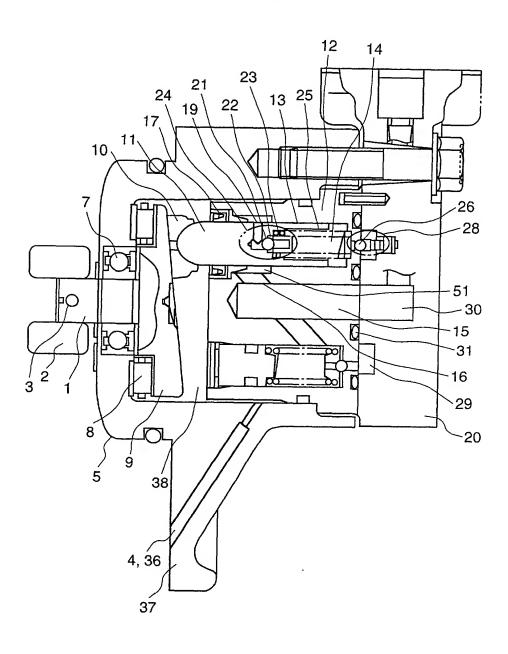




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FIG. 14(a)

SUCTION STROKE

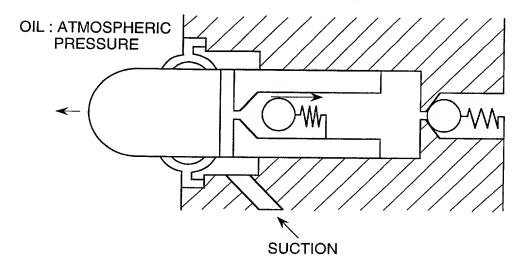
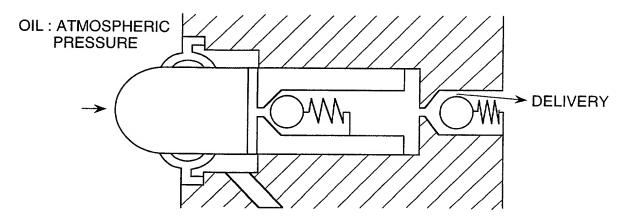


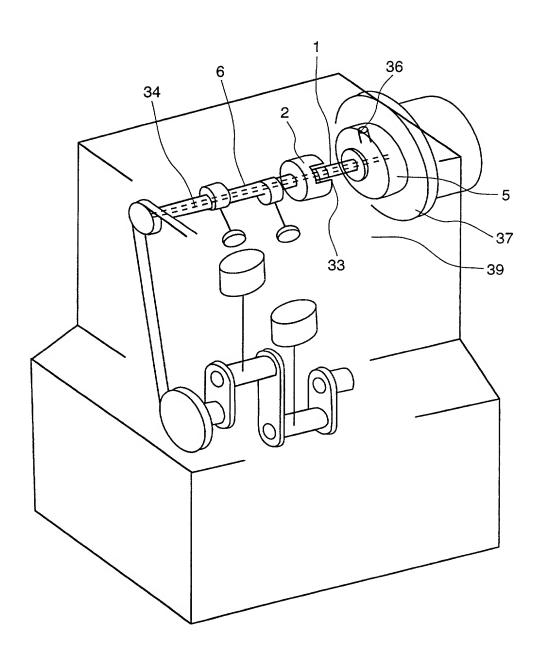
FIG. 14(b)

DELIVERY STROKE



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FIG. 15



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FIG. 16(a)

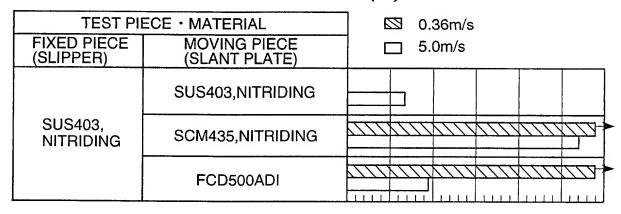


FIG. 16(b)

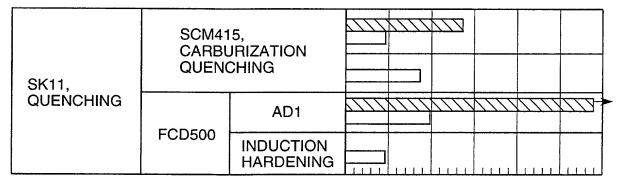
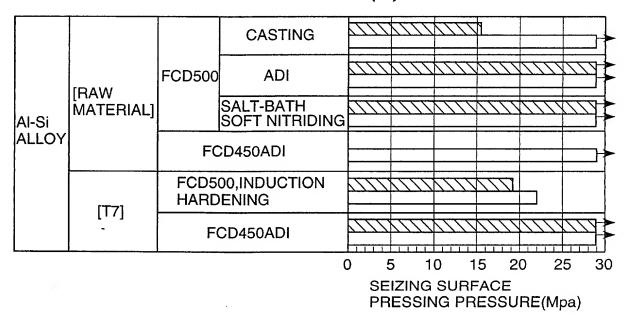


FIG. 16(c)



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FIG. 17(a)

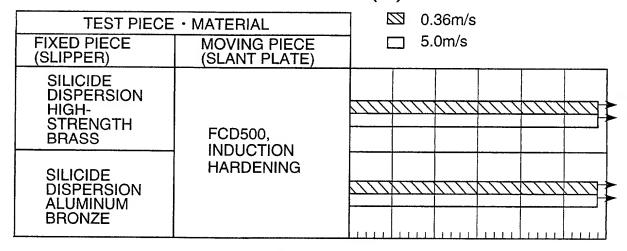


FIG. 17(b)

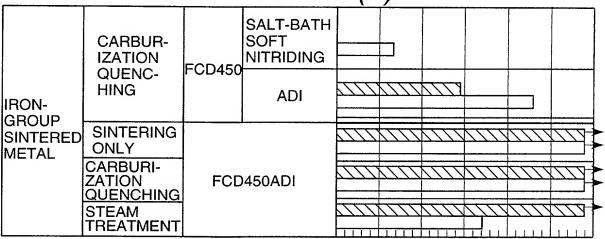
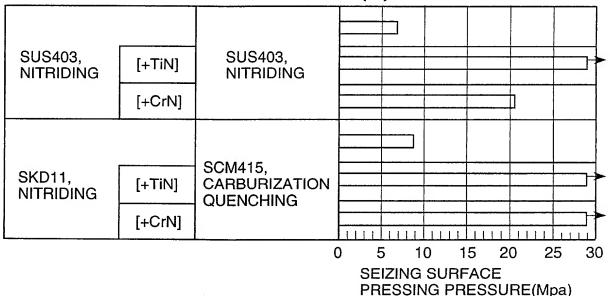


FIG. 17(c)



Crowell & Moring LLP Customer Service No. 23911

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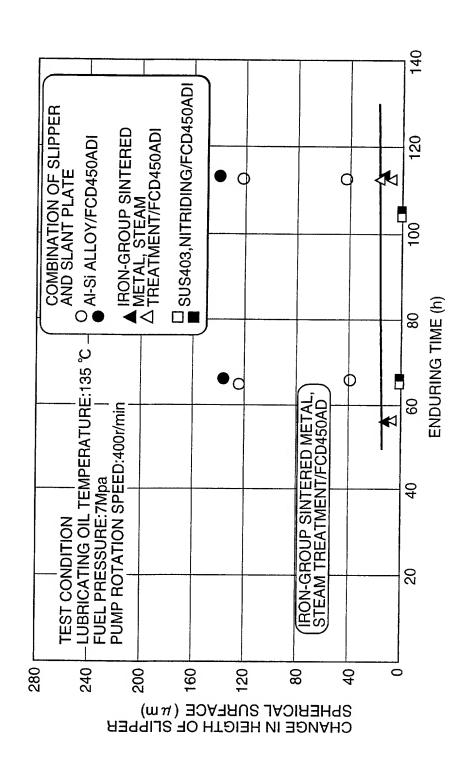


FIG 18

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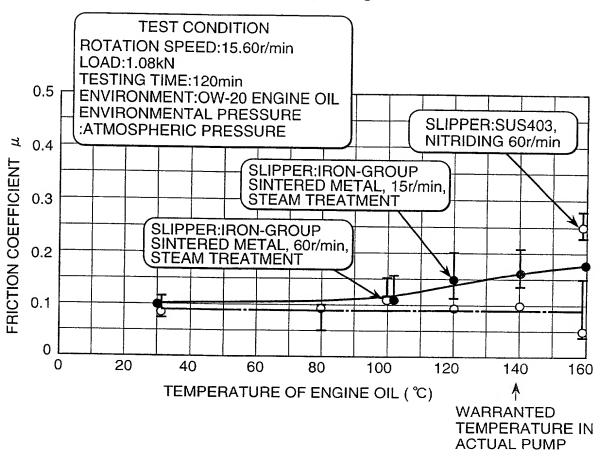
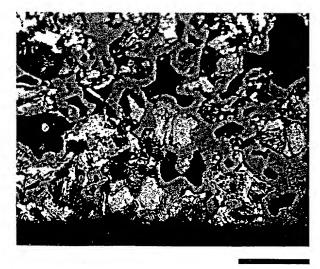
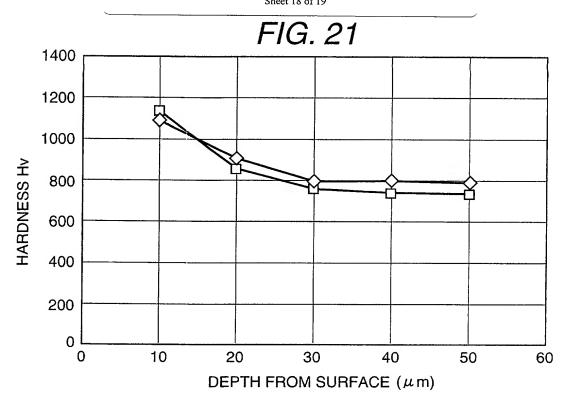
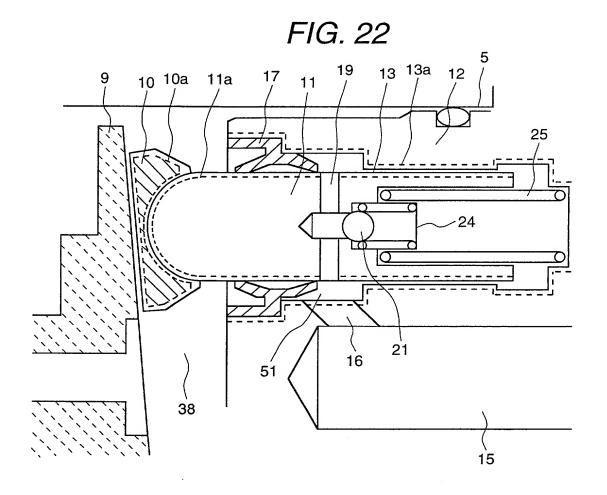


FIG. 20



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